<u>**IN THE CLAIMS**</u>:

A complete listing of the claims is set forth below:

1-42.   **(Canceled)**

43.   **(Previously Presented)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory storing a hierarchy of seller models, each seller model representing a seller of one or more products, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

a processor coupled with the memory, the processor computes the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

44.   **(Previously Presented)** The system of Claim 43, wherein the processor further adjusts the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria

45.   **(Previously Presented)** The system of Claim 43, wherein the processor further:

communicates product forecast models to a remote system;

receives from the remote system a promise computed at the remote system for a customer order requesting a quantity of a product through each seller, the promise computed according to the pre-allocated supply of the product to each seller;

receives from the remote system adjusted product forecast models reflecting the promise; and

recomputes the amount of the product that is ATP at each seller.

46.   **(Previously Presented)** The system of Claim 45, wherein:

all product forecast models for one or more sellers are communicated to the remote system; and

wherein the processor further:

receives from the remote system the promise also computed according to the amount of the product that is ATP at the one or more other sellers in the hierarchy; and

adjusts the amount of the product that is ATP at the one or more other sellers in the hierarchy when the promise exceeds the pre-allocated supply of the product to each seller.

47.   **(Previously Presented)** The system of Claim 43, wherein the product forecast model further represents a quantity of the product each seller has committed to selling and the processor adjusts the pre-allocated supply of the product to each seller according to the committed quantity.

48.   **(Previously Presented)** The system of Claim 43, wherein the processor further:

accepts a customer order requesting a quantity of a product through each seller, and computes a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product to each seller.

49.   **(Previously Presented)** The system of Claim 43, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller is computed according to the policy rules.

50.   **(Previously Presented)** The system of Claim 43, wherein the processor further adjusts either the forecasted sales or the pre-allocated supply of the product to each seller according to an arrival rate of customer orders for the product through each seller.

51.   **(Previously Presented)** A computer-implemented system for managing data associated with available-to-promise (ATP) products, comprising:

a memory storing a hierarchy of seller models representing a seller of products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

a processor coupled with the memory, the processor computes the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

52.   **(Previously Presented)** The system of Claim 51, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

53. **(Previously Presented)** The system of Claim 51, wherein the processor further adjusts the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

54. **(Previously Presented)** The system of Claim 51, wherein the processor further:

communicates product forecast models to a remote system;

receives from the remote system a promise computed at the remote system for a customer order requesting a quantity of one or more items through each seller, the promise computed according to at least the pre-allocated supply for corresponding products;

receives from the remote system adjusted product forecast models reflecting the promise; and

recomputes the amounts of the corresponding products that are ATP at each seller.

55. **(Previously Presented)** The system of Claim 51, wherein the product forecast model further represents a quantity of corresponding products each seller has committed to selling and the processor adjusts the pre-allocated supply of the product to each seller according to the committed quantity.

56. **(Previously Presented)** The system of Claim 51, wherein the processor further:

accepts a customer order requesting quantities of one or more items through each seller; and

computes a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

57. **(Previously Presented)** The system of Claim 51, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller are computed according to the policy rules.

58. **(Previously Presented)** The system of Claim 51, wherein the processor further adjusts either the forecasted sales or the pre-allocated supply for one or more products for each seller according to an arrival rate of customer orders for those products through each seller.

59.   **(Previously Presented)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing by a computer comprising a memory and a processor, a hierarchy of seller models stored in the memory, each seller model representing a seller of one or more products, each product having a product forecast model representing:

forecasted sales of the product through each seller;

planned supply of the product;

customer orders for the product through each seller; and

pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

computing by the processor, the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

60.   **(Previously Presented)** The method of Claim 59, further comprising adjusting the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

61.   **(Previously Presented)** The method of Claim 59, further comprising:

communicating product forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of a product through each seller, the promise having been computed according to the pre-allocated supply of the product to each seller;

receiving from the remote system adjusted product forecast models reflecting the promise; and

recomputing the amount of the product that is ATP at each seller.

62.   **(Previously Presented)** The method of Claim 61:

wherein all product forecast models for one or more sellers are communicated to the remote system;

wherein the promise is computed according to the amount of the product that is ATP at the one or more other sellers in the hierarchy; and

further comprising adjusting the amount of the product that is ATP at the one or more other sellers in the hierarchy when the promise exceeds the pre-allocated supply of the product to each seller.

63.   **(Previously Presented)** The method of Claim 59:

wherein the product forecast model further represents a quantity of the product each seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to each seller according to the committed quantity.

64.   **(Previously Presented)** The method of Claim 59, further comprising:

accepting a customer order requesting a quantity of a product through each seller, and computing a promise for the customer order according to the planned supply and one or more existing customer orders, the promise restricted according to the pre-allocated supply of the product to each seller.

65.   **(Previously Presented)** The method of Claim 59, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller is computed according to the policy rules.

66.   **(Previously Presented)** The method of Claim 59, further comprising adjusting either the forecast values or the pre-allocated supply of the product to each seller according to an arrival rate of customer orders for the product through each seller.

67.   **(Previously Presented)** A method for managing data associated with available-to-promise (ATP) products, comprising:

accessing by a computer comprising a memory and a processor, a hierarchy of seller models stored in the memory, each seller model representing a seller of products that each correspond to an item having one or more restrictions on its sale, at least two products corresponding to the same item but with at least one different restriction, each product having a product forecast model representing:

> forecasted sales of the product through each seller;

> planned supply of the product;

> customer orders for the product through each seller; and

> pre-allocated supply of the product to each seller, the pre-allocated supply is a supply of the product pre-allocated to each seller to promise to subsequent customer orders for the product through each seller; and

computing by the processor, the amount of the product that is ATP at a seller according to at least the planned supply of the product, the customer orders for the product through each seller, the pre-allocated supply of the product to each seller, and the amount of the product that is ATP at one or more other sellers in the hierarchy,

wherein the processor further adjusts the pre-allocated supply of the product to each seller according to customer orders across a time horizon and recomputes the amount of the product that is ATP at each seller according to the adjusted pre-allocated supply.

68.   **(Previously Presented)** The method of Claim 67, wherein the restrictions are selected from the group consisting of price restrictions, quantity restrictions, and lead time restrictions.

69. **(Previously Presented)** The method of Claim 67, further comprising adjusting the pre-allocated supply of the product to each seller according to one or more business criteria selected from the group consisting of seller criteria, product criteria, forecast criteria, supply criteria, customer order criteria, and policy criteria.

70. **(Previously Presented)** The method of Claim 67, further comprising:

communicating product forecast models to a remote system;

receiving a promise computed at the remote system for a customer order requesting a quantity of one or more items through each seller, the promise having been computed according to at least the pre-allocated supply for corresponding products;

receiving from the remote system adjusted product forecast models reflecting the promise; and

recomputing the amounts of the corresponding products that are ATP at each seller.

71. **(Previously Presented)** The method of Claim 67, wherein:

the product forecast model further represents a quantity of corresponding products each seller has committed to selling; and

further comprising adjusting the pre-allocated supply of the product to each seller according to the committed quantity.

72. **(Previously Presented)** The method of Claim 67, further comprising:

accepting a customer order requesting quantities of one or more items through each seller, and computing a promise for the customer order according to the pre-allocated supply for corresponding products, wherein the promise comprises a plurality of options each with one or more of the restrictions specified for these products.

73.   **(Previously Presented)** The method of Claim 67, wherein:

each product forecast model is extensible such that one or more policy rules is associated with the corresponding product;

each policy rule comprises a restriction on either the forecasted sales or the pre-allocated supply of the product to each seller; and

either the forecasted sales or the pre-allocated supply of the product to each seller is computed according to the policy rules.

74.   **(Previously Presented)** The method of Claim 67, further comprising adjusting either the forecasted sales or the pre-allocated supply for one or more products for each seller according to an arrival rate of customer orders for those products through each seller.